1892MNRAS..53...70T

Observations of Winnecke's Periodical Comet at Windsor, New South Wales. By John Tebbutt.

Winnecke's Comet was found with the help of Dr. von Haerdtl's ephemeris on June 12, but as it could be well seen from the northern hemisphere and was unfavourably placed here for observation, no observations were then attempted. The comet was picked up on July 17, after having passed conjunction with the Sun, and was observed on all possible occasions, when the weather and the Moon's absence permitted, till September 27. All the positions sent herewith were determined with a square bar-micrometer, the 4½-inch equatoreal being employed on July 17 and the 8-inch instrument on all the other dates. On looking for the comet on September 27 it could not be seen as a separate object, but a small star of the tenth magnitude was found fringed with a faint nebulous haze. As the position of this object agreed closely with that derived from an extension of Dr. Haerdtl's ephemeris in *Ast. Nach.*, No. 3083, I made four comparisons of it with comparison star No. 29. Clouds prevented further observations, so that the separation of the comet from the small star was not seen.

I trust the series of positions now sent will turn out as useful as those published for the last return in the forty-seventh volume of the *Monthly Notices.* I may add that a careful search was made here for Comet Tempel 1867 II. on June 19 between $17^h\ 30^m$ and $18^h\ 50^m$ of R.A. and 25° and 32° of south declination, but although the sky was brilliantly clear and the Moon absent, no trace of the comet could be found.

Private Observatory, The Peninsula, Windsor, N. S. Wales:
1892 *October* 27.

1892MNRAS..53...70T

Observations of Winnecke's Comet.

1892.	Windsor Mean Time.	Comet−Star. Δ R.A.	Comet−Star. Δ N.P.D.	Comps.	Comet's App. R.A.	Log. *p* Δ.	Comet's App. N.P.D.	Log. *p* Δ.	Reduction to App. Place.		Star.
	h m s	m s	′ ″		h m s	−	° ′ ″	+	s	″	
July 17	17 48 57	+0 55·54	− 2 32·3	10	5 15 18·04	9·6095	94 56 36·9	0·6524	−0·11	−12·1	1
19	17 19 27	+1 58·15	+ 1 55·0	10	...	9·6200	...	0·6264	−0·02	−13·6	2
20	17 41 36	−0 37·89	+ 2 23·5	10	...	9·5739	...	0·5972	+0·01	−14·3	3
20	17 48 33	+2 42·36	+ 0 46·7	8	...	9·5619	...	0·5939	+0·02	−14·4	4
21	17 30 57	−3 17·05	+ 5 7·8	14	...	9·5760	...	0·5814	+0·04	−14·9	5
22	17 15 33	+2 53·70	− 0 36·2	12	4 39 34·06	9·5869	102 40 11·1	0·5698	+0·12	−15·9	6
23	17 48 41	+7 11·65	+ 1 51·9	5	4 33 38·50	9·5058	103 54 5·5	0·5257	+0·19	−16·7	7
24	17 26 26	−3 38·77	− 8 53·0	8	4 28 18·80	9·5366	104 59 35·5	0·5182	+0·17	−17·0	8
27	17 35 16	+0 6·79	− 7 31·2	11	4 14 2·36	9·4580	107 50 23·0	0·4409	+0·34	−18·9	9
28	16 31 47	−1 2·85	+ 0 44·9	10	...	9·5842	...	0·4816	+0·38	−19·3	10
	16 31 47	−4 55·63	− 9 28·5	10	...	9·5842	...	0·4816	+0·35	−19·3	11
29	16 15 24	+2 1·60	− 2 38·6	10	4 6 10·03	9·6003	109 22 4·6	0·4798	+0·44	−19·9	12
29	16 15 24	+0 58·57	+ 5 17·9	10	4 6 10·19	9·6003	109 22 6·5	0·4798	+0·44	−19·9	13
29	16 57 17	+0 57·45	−10 31·4	7	4 6 3·38	9·5190	109 23 21·3	0·4312	+0·44	−20·0	14
Aug. 2	16 9 18	+1 43·33	+ 2 35·1	9	3 52 22·87	9·5661	111 55 32·6	0·4038	+0·64	−21·7	15
2	16 9 18	+1 26·47	+ 1 7·6	9	3 52 23·05	9·5661	111 55 31·1	0·4038	+0·64	−21·7	16
3	15 54 24	+1 12·59	− 7 49·1	10	3 49 21·73	9·5826	112 27 48·8	0·4075	+0·68	−22·1	17

1892.	Windsor Mean Time.	Comet – Star. Δ R.A.	Comet – Star. Δ N.P.D.	Comps.	Comet's App. R.A.	Log. p Δ.	Comet's App. N.P.D.	Log. p Δ.	Reduction to App. Place.		Star.
	h m s	m s	′ ″		h m s	–	° ′ ″	+	s	″	
Aug. 15	13 50 8	–2 27·04	– 8 24·0	12	3 19 31·69	9·6704	117 12 59·9	0·4042	+1·24	–25·5	18
23	13 57 48	+7 9·54	+ 0 13·6	8	3 1 41·85	9·5899	119 19 57·8	0·2121	+1·72	–26·7	19
23	13 57 48	–5 48·80	– 4 18·9	8	3 1 41·78	9·5899	119 20 2·4	0·2121	+1·61	–26·8	20
25	13 34 22	–2 1·44	+ 6 23·0	10	2 57 12·09	9·6128	119 45 42·3	0·2297	+1·74	–26·9	21
26	13 44 17	–1 18·35	– 9 51·3	10	2 54 53·74	9·5823	119 57 52·2	0·1737	+1·80	–27·0	22
27	13 56 2	+3 54·57	– 6 30·5	10	2 52 35·15	9·5424	120 9 32·7	0·1080	+1·89	–27·0	23
27	13 56 2	+2 31·18	– 6 54·1	10	2 52 35·26	9·5424	120 9 32·5	0·1080	+1·88	–27·0	24
Sept. 16	10 0 45	+0 43·27	+ 9 52·2	10	...	9·7207	...	0·3964	+2·76	–25·4	25
16	10 0 45	–2 19·91	+ 0 59·7	10	...	9·7207	...	0·3964	+2·74	–25·5	26
17	10 36 5	–1 45·31	+ 8 43·6	10	...	9·6744	...	0·2751	+2·78	–25·3	25
17	10 36 5	–4 48·47	– 0 8·3	10	...	9·6744	...	0·2751	+2·76	–25·4	26
18	11 10 3	+2 7·38	– 1 44·2	5	...	9·6087	...	0·1327	+2·84	–24·9	27
18	11 10 3	–4 13·13	+ 6 54·6	5	...	9·6087	...	0·1327	+2·80	–25·2	25
18	11 10 3	–7 16·36	– 1 58·7	5	...	9·6087	...	0·1327	+2·78	–25·3	26
20	11 49 45	+2 34·29	+10 12·9	10	1 54 55·45	9·4790	121 46 26·2	9·9195	+2·91	–24·5	28
22	10 33 58	–1 58·05	+ 2 28·5	15	1 50 23·15	9·6279	121 38 42·1	0·1814	+2·95	–24·2	28
26	11 3 48	+2 15·77	– 0 0·2	10	1 41 20·79	9·5030	121 15 46·1	9·9897	+3·07	–23·0	29
27	11 34 5	+0 2·09	– 7 31·4	4	1 39 7·13	9·3766	121 8 15·0	9·8444	+3·09	–22·9	29

1892MNRAS..53...70T

Mean Places of the Comparison Stars for 1892·0.

Star.	R.A.			N.P.D.			Authorities.
	h	m	s	°	′	″	
1	5	14	22·61	94	59	21·3	Lalande, 9981–2.
2	4	57	34	98	22		Equatoreal.
3	4	52	59	99	55		Equatoreal.
4	4	49	37	99	57		Equatoreal.
5	4	49	0	101	18		Equatoreal.
6	4	36	40·24	102	41	3·2	Lalande, 8880; Schjellerup, 1508–9; Armagh$_2$, 580.
7	4	26	26·66	103	52	30·3	Lalande, 8575; Schjellerup, 1449.
8	4	31	57·40	105	8	45·5	Lalande, 8745–6; Arg.–Oeltzen, 3220–1.
9	4	13	55·23	107	58	13·1	Lalande, 8119.
10	4	11	8	108	36		Equatoreal.
11	4	15	1	108	47		Equatoreal.
12	4	4	7·99	109	25	3·1	Arg.–Oeltzen, 2842; Cincinnati Zone, 579.
13	4	5	11·18	109	17	8·5	Lalande, 7815; Cincinnati Zone, 584; Armagh$_2$, 516.
14	4	5	5·49	109	34	12·7	Arg.–Oeltzen, 2861; Cincinnati Zone, 583.
15	3	50	38·90	111	53	19·2	Lalande, 7298; Cincinnati Zone, 542.
16	3	50	55·94	111	54	45·2	Lalande, 7311; Cincinnati Zone, 543.
17	3	48	8·46	112	36	0·0	Lalande, 7217; Arg.–Oeltzen, 2613.
18	3	21	57·49	117	21	49·4	Arg.–Oeltzen, 2279; Cordoba Zone, 46·103.
19	2	54	30·59	119	20	10·9	Arg.–Oeltzen, 1951; Brussels, 1165; Cordoba Zone, 73·116; Stone, 1233.
20	3	7	28·97	119	24	48·1	Yarnall$_3$, 1375; Brussels, 1228; Cordoba Zone, 73·136. Greenwich Cat., 1880·484; Stone, 1317
21	2	59	11·79	119	39	46·2	Arg.–Oeltzen, 2006; Cordoba Zone, 73·123.
22	2	56	10·29	120	8	10·5	Arg.–Oeltzen, 1970; Cordoba Zone, 73·120.
23	2	48	38·69	120	16	30·2	Arg.–Oeltzen, 1881; Cordoba Zone, 73·109.
24	2	50	2·20	120	16	53·6	Arg.–Oeltzen, 1899–1900; Cordoba Zone, 73·110.
25	2	4	0	121	45		Equatoreal.
26	2	7	4	121	54		Equatoreal.
27	1	57	40	121	55		Equatoreal.
28	1	52	18·25	121	36	37·8	Cordoba Zone, 107·43; Stone, 770.
29	1	39	1·95	121	16	9·3	Cordoba Zone, 107·20.

1892MNRAS..53...70T

Galactic Longitudes and Latitudes of the brighter Stars in a Zone of the Heavens containing the Milky Way. By A. Marth.

In a paper communicated, twenty years ago, to the Royal Astronomical Society by Mr. Lassell, and published in vol. xxxiii. of the *Monthly Notices* (pp. 1–14 and 517–527), with a supplement published in vol. xxxiv. (pp. 77–82), I supplied the galactic co-ordinates of the leading stars within or near the Milky Way, so that they might serve as a correct groundwork for representations of the Galaxy, for which an appeal was made to competent draughtsmen. At that time the only accessible modern delineation of the Milky Way derived directly from the sky was that of the southern portion from Antinous to Monoceros, found on plate xiii. of Sir John Herschel's Results of Astronomical Observations made at the Cape of Good Hope. As explained in article (341) of the volume, Herschel had made his original drawings on a larger scale on blank paper on which he had pricked off the stars from Bode's charts. Adopting for his general map the projection, in which the galactic circle or the medial line of the entire Galaxy is extended into a straight line, he had then laid down "(from a good celestial globe, by Bardin, for 1800) the chief stars as a skeleton—inserting others from the maps by the aid of proportional compasses," and had worked over it an accurate resemblance of the forms and, as near as possible, of the intensities of the several parts of the Milky Way as represented in the original drawings. Whatever device may have been used in transferring the positions of the chief stars from the globe to the sheet of paper, the introduction of some sensible inaccuracies in fixing the positions in that way could not well be avoided, and it was with the view of sparing intending draughtsmen all such preliminary trouble, and of insuring the correct positions of the stars, that I prepared the former list of co-ordinates, in the hope that competent observers would take advantage of the means thus provided.

A few years later I was informed by Mr. Trouvelot, then at Cambridge, Mass., that he had adopted the data of the list as the foundation of a pastel drawing of the Galaxy, which was being exhibited at the Philadelphia Exhibition of 1876, and that it was under consideration how to get it published. As I had not heard since what had become of the publication, I wrote last May to Mr. Trouvelot, now at Meudon, to inquire, and he was good enough not only to give me the desired information, but also to send me, with some smaller photographs, a print (white on black) of the one-half of his drawing which has been published by Charles Scribner's Sons, of New York, in their series of astronomical drawings. This print is now in the library of the Royal Astronomical Society, to which, by leave and in the name